



# Community Construction Management Plan

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## SR 520 West Approach Bridge North

***9/17/2013***

The Community Construction Management Plan (CCMP) outlines the process through which members of the public have an ongoing opportunity to provide input that may be considered for construction management decisions to help avoid, minimize, and/or mitigate the effects of construction activities on historic and other properties. It also guides the actions of construction contractors, provides opportunities for the Washington State Department of Transportation (WSDOT) and hired contractors to keep the public and Section 106 concurring parties informed, and gathers input to improve and modify the construction practices addressed by the CCMP.

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## **Acronyms and Abbreviations**

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BMP	Best management practice
CCMP	Community Construction Management Plan
CFR	Code of Federal Regulations
DAHP	Washington State Department of Archaeology and Historic Preservation
DPD	City of Seattle Department of Planning and Development
FHWA	Federal Highway Administration
HOV	High-occupancy vehicle
MOHAI	Museum of History and Industry
PA	Programmatic Agreement
SPCC	Spill Prevention, Control and Countermeasure Plans
TESC	Temporary Erosion and Sediment Control
TVMPP	Tree and Vegetation Management and Protection Plan
WABN	West Approach Bridge North
WAC	Washington Administrative Code
WQMPP	Water Quality Monitoring and Protection Plan
WSDOT	Washington State Department of Transportation



## **I. Community Construction Management Plan Overview**

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### **A. Purpose and background**

WSDOT developed the Community Construction Management Plan (CCMP) as a mitigation commitment for adverse effects from the [I-5 to Medina: Bridge Replacement and HOV Project](#) (I-5 to Medina project) to historic properties during the National Historic Preservation Act Section 106 Consultation process. Because Section 106 consulting parties had significant concerns related to construction effects (both indirect and direct) to historic properties, development of the CCMP was included in the earliest iterations of the [Section 106 Programmatic Agreement](#) (PA). Construction effects (as defined in [36 CFR 800.5\(a\)\(2\)](#)) may include vibration, noise, change of use or physical features of a property's setting, visual, atmospheric or audible intrusions.

During the consultation process, participants recognized that effects the CCMP was intended to mitigate were not exclusive to historic properties, but could potentially affect other resources in similar ways. The CCMP then became a project-wide commitment, not exclusive to Section 106 PA concurring parties. The PA language references the concurring parties "and others potentially affected by Project construction."

This volume of the CCMP has been developed specifically for the SR 520 West Approach Bridge North (WABN) area and construction activities. The [SR 520 West Approach Bridge](#) is one construction phase of the [I-5 to Medina: Bridge Replacement and HOV Project](#), which is part of the [SR 520 Bridge Replacement and HOV Program](#). The WABN is the first portion of the West Approach Bridge construction phase, to construct the north half of the new SR 520 from the new floating bridge to Montlake.

The CCMP allows members of the public an ongoing opportunity to provide input that may be considered for construction management decisions to avoid, minimize, or mitigate the effects of construction activities on historic and other properties. Additional volumes and/or updates to existing CCMPs will be developed in conjunction with each contract awarded for future construction phases of the I-5 to Medina project, including construction of the south half of the West Approach Bridge.

### **B. How to use the CCMP**

The WABN CCMP is a living document which will be updated through the course of the project to incorporate changes to construction activities or approaches to the work. The initial version of the WABN CCMP was developed prior to selection of a contractor for the project, and will be reviewed, and potentially updated, with the contractor, once the selected construction contract has been executed.

The CCMP includes commitments made through the [Section 106 PA](#), best management practices (BMPs), the WABN contract documents, environmental commitments made through other regulatory processes, including the city of Seattle shoreline permits, and additional tools that will help to avoid, minimize, and/or mitigate construction effects on local communities and historic properties. WSDOT and the contractor, as appropriate, will meet with the concurring parties to the [Section 106 PA](#) and others potentially affected by construction regularly during the construction of the project to discuss the CCMP.



This CCMP is best read and reviewed electronically as there are a number of hyperlinks throughout the document. These hyperlinks direct users to websites and environmental documentation that will provide more information on each topic.

The public is encouraged to provide feedback about the effectiveness of the CCMP and suggest changes. Information about this CCMP is available at project-related public meetings and on the [project website](#). While the WABN CCMP is for construction effects, questions on other topics such as design, permitting, operations and maintenance, and other non-construction related activities on the WABN can be directed to [SR520Bridge@wsdot.wa.gov](mailto:SR520Bridge@wsdot.wa.gov). Contact information for CCMP-related effects is listed in the [Questions or Concerns?](#) section of this document.

## **C. WSDOT Roles and Responsibilities for WABN**

WABN will be constructed using a design-bid-build contract, with design and plan preparation being under the direct control of WSDOT. An open competitive bidding process will be used to select the contractor. The contract is scheduled for advertisement to contractors in spring 2014, with construction expected to occur from summer 2014 to fall 2016.

WSDOT's responsibilities include:

- Preparing final design including the specifications, criteria, and commitments to which the contractor will be held.
- Performing construction management, including inspection and monitoring of contractor activities to ensure contract requirements are met.
- Ensuring all local, state, and federal permits are obtained as necessary for compliance with applicable laws and regulations.
- Coordinating and communicating with local governments, neighborhoods, and businesses about possible project effects.

## **D. Contractor Roles and Responsibilities for WABN**

The responsibilities of the contractor include:

- Determining construction methods and techniques for project implementation.
- Constructing the project improvements for WABN in accordance with the contract plans and specifications.

Once the construction contract has been executed, WSDOT will work with the contractor to ensure the contractor reviews the CCMP and incorporates means and methods as appropriate.



## **II. Project Overview**

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### **A. About the SR 520 West Approach Bridge North Project**

#### *Description*

The [SR 520 West Approach Bridge](#) is one construction phase of the [I-5 to Medina: Bridge Replacement and HOV Project](#), which is part of the [SR 520 Bridge Replacement and HOV Program](#). The SR 520 Program's 12.8-mile-long corridor area begins at I-5 in Seattle and extends to SR 202 in Redmond. The SR 520 Program also includes the [Pontoon Construction Project](#) and the [Medina to SR 202: Eastside Transit and HOV Project](#).

The new West Approach Bridge will be built as two separate structures, a north bridge and a south bridge. WABN is the first portion of the West Approach Bridge construction phase. The WABN constructs a new structure along the north side of the existing west approach bridge (see [Figure 1](#) for project limits). The existing west approach bridge is built on hollow columns, which are vulnerable to a catastrophic earthquake, and the four-lane roadway has narrow shoulders and lacks transit/HOV lanes. The WABN will connect westbound traffic from the floating bridge to Montlake. It will also feature a new 14-foot-wide regional bicycle/pedestrian path and a dedicated transit/HOV lane that connects these facilities to the new floating bridge and, in turn, to the Eastside. The WABN will also convert the existing west approach bridge to an eastbound only traffic configuration.

#### *Schedule*

Construction activities within the project area are scheduled to begin in summer 2014. Compliance with environmental permits will restrict the construction schedule for when some activities, such as in-water pile driving, can occur. WSDOT anticipates completing construction by connecting the new WABN structure to the [new floating bridge](#) and opening to drivers by fall 2016.

#### *Locations of activities and access points*

Construction activities for the WABN will occur at several locations and via various access points in the Montlake area and Lake Washington:

- **Barges and work platforms on the lake.** WSDOT anticipates that the contractor will utilize barges and barge-accessible work platforms to transport materials to and from the construction site. The contractor will construct work bridges adjacent and to the north of the existing west approach bridge structure, between the western Lake Washington shoreline in Montlake and the western high-rise.
- **SR 520 mainline access.** The contractor will be able to access the SR 520 mainline from Foster Island and a construction on- and off-ramp that will be built near 24th Avenue East.
- **Staging areas.** Available construction staging areas are located within WSDOT-owned right of way adjacent to the work to be performed. Potential staging area sites include the former Museum of History and Industry (MOHAI) northeast of 24th Avenue East and SR 520, and



two areas south of SR 520 and east of East Lake Washington Boulevard on WSDOT-owned right of way and land known as the “WSDOT peninsula”.

- **Access from arterial streets.** Limited use of local arterial streets could be used for access to construction sites.

[Figure 2](#) and [Figure 3](#) show additional information on work locations and anticipated sequencing.

## **B. Agency Coordination**

WSDOT is responsible for the construction of the WABN. As part of the construction process, WSDOT has coordinated with and/or obtained numerous permits and/or approvals from a number of agencies, tribes and jurisdictions, including:

- Advisory Council on Historic Preservation
- Federal Highway Administration (FHWA)
- National Park Service
- National Oceanic and Atmospheric Administration – National Marine Fisheries Service
- U.S. Army Corps of Engineers
- U.S. Coast Guard
- U.S. Environmental Protection Agency
- U.S. Fish and Wildlife Service
- Puget Sound Clean Air Agency
- Washington State Department of Archaeology and Historic Preservation (DAHP)
- Washington State Department of Ecology
- Washington State Department of Fish and Wildlife
- Washington State Department of Natural Resources
- Washington State Recreation and Conservation Office
- King County
- City of Seattle
- Tribal nations



### **III. Construction Components and Effects**

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This section of the CCMP is organized by potential construction effect. Construction effects covered in this section include:

- [Noise](#)
- [Vibration](#)
- [Air Quality and Fugitive Dust](#)
- [Visual Quality: Aesthetics, Glare, Lighting](#)
- [Traffic and Transportation](#)
- [Utilities and Services](#)
- [Vegetation Management and Erosion Control](#)
- [Over-Water and In-Water Work](#)
- [Construction Staging in WSDOT Right of Way](#)

Each of these construction effects sections includes four subsections to provide the reader with details on the particular effect:

- **What to Expect During Construction:** Characterizes the location, potential construction activities, duration and intensity of activity for each construction effect.
- **Applicable Commitments:** Provides information about and web links to documents describing construction-related commitments, including resources that the contractor and WSDOT will use to determine mitigation activities.
- **Measures and Practices:** Describes the potential mitigation activities that may be implemented to mitigate for the stated construction effect.
- **For More Information:** Provides resources and contact information to assist with questions that may arise during construction.

#### **A. Project construction overview**

Construction activities vary by location. See [Figure 2](#) for a map that identifies the construction areas, activities, and sequencing for the WABN.





## **B. Potential construction effects**

### ***1. Noise***

The contractor will perform many construction activities throughout the duration of WABN construction. Each activity uses different types of equipment and results in different levels and kinds of noise.

Construction is expected to occur at/on several locations including:

- Lake Washington and Union Bay.
- Work bridges and barges in Lake Washington.
- Work platforms in the Foster Island area.
- Staging areas, potentially at the former MOHAI property near East Montlake Park, and two areas south of SR 520 and east of East Lake Washington Boulevard on WSDOT-owned right of way and land known as the “WSDOT peninsula.”
- The site of a future stormwater management facility near the former MOHAI site.
- The existing westbound Lake Washington Boulevard off-ramp and unused R.H. Thomson ramps.
- Some nearby local arterial streets.

[Figure 4](#) shows areas where nighttime work and associated noise are anticipated.

### ***What to expect during construction***

WSDOT anticipates that the contractor will primarily work during the day and only at night as necessary to complete the project as required by the contract. WSDOT is coordinating with the city of Seattle to obtain noise variances for nighttime work activities that exceed allowable levels. The information in this section will be updated when more information is known about allowable nighttime work.

#### **Daytime work**

Daytime work in residential areas will likely occur between 7 a.m. and 10 p.m. Monday through Friday, and between 9 a.m. and 10 p.m. Saturday and Sunday.

#### **Nighttime work**

Nighttime work activities will require a [noise variance \(or exemption\) from the city of Seattle](#) when noise levels are planned to exceed allowable levels.

Nighttime work in residential areas will likely occur between 10 p.m. and 7 a.m. Monday through Friday and between 10 p.m. and 9 a.m. Saturday and Sunday. Due to existing traffic congestion on Montlake Boulevard and local streets, work in these areas is not feasible during peak commute hours. Therefore, work along Montlake Boulevard East and most local streets will be completed at night or during off-peak commute hours. WSDOT is working with City of Seattle Department of Planning and Development (DPD) to obtain noise variances and will update this section to describe the variances and notification requirements once confirmed.



### **Potentially noisy activities**

Noise may sound different based on the surface over which it is travelling. Noise from construction activities attenuates over a “hard” surface (like flat water or pavement) less quickly than over “soft” surfaces (like grass). Therefore the same equipment may sound different depending on where you are standing. [Figure 5](#) helps illustrate how such noise is perceived at varying distances. More information about noise can be found [on the WSDOT website](#) and in the I-5 to Medina project [Construction Noise and Vibration Mitigation and Monitoring Plan](#).

### ***Applicable commitments***

WSDOT’s [Noise Program](#) ensures compliance with local, state, and federal environmental regulations on noise from traffic and construction. During construction, WSDOT and the contractor need to comply with permit requirements, as described in more detail later in this section. The process for determining appropriate mitigation is a dynamic process for construction noise because there is variation between construction projects. Construction noise is typically exempt from noise control requirements in the [Washington Administrative Code \(WAC\)](#), but is subject to local noise level limits as required through permits.

WSDOT and the contractor will adhere to all WSDOT, federal, local, and statewide regulatory requirements and as required by the [contract](#) documents. WSDOT has prepared a [Construction Noise and Vibration Mitigation and Monitoring Plan](#) that identifies the expected noise levels at identified locations, risk of exceeding allowable levels and measures for the contractor to implement if levels are anticipated to exceed allowable levels. A detailed mathematical model, based on the types of equipment and activities, is used to determine the expected levels of noise at nearby receivers.

The [Seattle Municipal Code chapter 25.08.425](#) addresses sounds created by construction and maintenance equipment. City of Seattle noise level limits allow different levels for various types of equipment. For this project, the construction noise analysis used the FHWA’s [construction noise method](#) to determine future construction noise levels.

### ***Measures and practices***

Current BMPs, [WSDOT standard specifications](#), and local ordinances will be followed by the contractor. WSDOT will require the contractor to implement the following BMPs for the nighttime work activities:

- Use of impact or impulsive type tools such as hoe rams or Vactor trucks will be prohibited between the hours of 10 p.m. and 7 a.m. Monday through Friday and 10 p.m. and 9 a.m. Saturday, Sunday and holidays.
- Use of ambient sensitive backup warning devices on all vehicles. As an alternative, the contractor may use back-up observers in lieu of pure tone back-up warning devices for all equipment except dump trucks in compliance with WAC Chapter [296-155-610](#) and [296-155-615](#). The contractor will use back-up observers and back-up warning devices for dump trucks in compliance with WAC Chapter [296-155-610](#).



- All trucks performing export haul will have well-maintained bed liners as inspected and approved by WSDOT.
- Prohibiting the banging of truck tailgates. All truck tailgates will be secured to prevent excessive noise from banging.
- Use of WSDOT approved noise mitigation shields, noise blankets, skirts, or other means to reduce the effects of stationary noise generating equipment, such as light plants, generators, compressors, and jackhammers.

Additional BMPs may be identified after the contractor is selected, and this section of the CCMP may be updated if needed to reflect additionally-identified BMPs. These may include:

- Limiting the use of equipment using horns, alarms or sirens anywhere on site. Limiting night-time work operations; when working at night, limit operations to less noisy construction such as material delivery, concrete placement, and/or reinforcing steel placement. Limiting loud “impact” operations such as pile-driving and demolition to daytime hours.
- Possible use of innovative construction techniques to build precast concrete elements at existing industrial sites, which could reduce the need to perform construction operations on Lake Washington.

#### ***For more information***

The issuance of noise variances or exemptions is a formal process with the city of Seattle. Additional information will be provided through future CCMP revisions once it is known.

To find out more about noise variances and the process for the city of Seattle, visit the City of [Seattle Department of Planning and Development website](#).

To contact the project about construction noise happening in your area, see the contact information in the [Questions or Concerns?](#) section of this document or visit the [SR 520 Orange Page](#).

## ***2. Vibration***

Similar to noise, different types of construction activities and equipment may cause varying vibration levels. While low vibration levels may be imperceptible or only slightly noticeable, higher levels could be more noticeable to the point of being annoying or unpleasant. The highest levels could possibly result in damage to properties. However, the vibration-causing activities conducted during the construction of the WABN will be limited to levels below criteria expected to damage structures.

#### ***What to expect during construction***

WSDOT is committed to minimizing activities that would result in noticeable vibrations and will work to prevent property damage; however, some activities necessary for WABN construction are likely to cause vibrations. As described in the [Construction Noise and Vibration Plan](#), construction activities anticipated for the WABN that may induce vibrations include pile driving, drilled shaft foundation construction, cofferdam installation and demolition of existing structures.



The construction contract will specify threshold limits for vibration levels. WSDOT will request access to properties to inspect specific locations prior to beginning construction. Property owners will be contacted by WSDOT to schedule these inspections to document the existing condition of the buildings, as well provide information to the residents about upcoming construction activities which may cause vibrations.

### ***Applicable commitments***

WSDOT engaged the services of a vibration expert to evaluate the I-5 to Medina project corridor, including any potential haul routes along city arterial streets, and to identify areas where impacts to properties within the affected area may occur as a result of vibration. The vibration expert prepared a [Construction Noise and Vibration Plan](#) for the I-5 to Medina corridor that identifies the expected vibration levels at nearby receivers, risk of exceeding the damage risk criteria for vibration, control measures for the contractor to implement where exceeding the criteria is predicted, and locations where monitoring should be conducted. Mathematical modeling, based on the types of construction equipment and activities, was used to determine the expected levels of vibration at nearby receivers.

WSDOT will require the construction contractor to identify how construction activities will be carried out in such a way as to ensure that vibrations do not reach a level that causes architectural or structural damage to any properties.

If property owners observe damage to their properties, WSDOT will consult with them to assess any necessary monitoring and/or repairs if the damage is determined to be caused by WABN construction. If the private property affected is a historic property as defined by the National Historic Preservation Act, the repairs will be consistent with the U.S. Secretary of the Interior's [Standards for the Treatment of Historic Properties](#). Additionally, for affected historic properties, WSDOT will offer DAHP the opportunity to review and comment on the consistency of any repairs with the Standards. WSDOT will also coordinate with the city of Seattle Landmarks Board as necessary.

### ***Measures and practices***

As described above, the Construction Noise and Vibration Plan indicates that if a property is potentially vulnerable to construction-related vibration, WSDOT will take vibration measurements before construction. The analysis does not indicate vibration damage risk associated with WABN construction to identified historic properties.

### ***For more information***

If damage is identified by a property owner during construction, the property owner should notify WSDOT [by email](#) or using the 24-hour construction hotline phone number listed in the [Questions or Concerns?](#) section of this document. WSDOT will respond within 72 hours and will consult with property owners to assess the cause of the damage in order to identify and provide for any necessary repairs. If WSDOT determines that project construction activities are resulting in structural or architectural damage to properties, WSDOT will direct the contractor to stop working on that construction activity until appropriate safeguards can be put in place. If WSDOT determines that an emergency situation is occurring (or has occurred) that threatens injury or



significant structural damage, WSDOT will halt the construction activities as rapidly as possible and take necessary measures to stabilize structures and protect public safety.

You can also visit the [SR 520 Orange Page](#) for up-to-date construction information.

### ***3. Air Quality and Fugitive Dust***

Some construction activities, especially those involving movement of soil, may result in emissions of air pollutants such as fugitive dust, engine exhaust from trucks or other construction equipment, and volatile organic compounds from asphalt paving. Fugitive dust is particulate matter that is suspended in the air by wind or human activities. Projects that require moving soil or otherwise have the potential to create fugitive dust are required to employ BMPs to control dust at project sites.

#### ***What to expect during construction***

Air quality issues and fugitive dust are generally associated with activities such as mobilization, general construction (particularly earthmoving operations and construction truck traffic), and demolition. Air quality can also be adversely affected by construction truck traffic and the hauling of materials over large distances.

#### ***Applicable commitments***

WSDOT and the contractor will adhere to all WSDOT, federal, local, and statewide regulatory requirements and/or as required by the contract. A Fugitive Dust Prevention and Control Plan will be prepared by the contractor that provides additional details on activities to mitigate air quality impacts during construction.

The contractor will also identify the methods for controlling concrete dust and sawcutting residue in the Concrete Containment and Disposal Plan, which will be completed prior to performing any dust-generating activities.

The Puget Sound Clean Air Agency is the primary agency overseeing air quality and fugitive dust issues in the Seattle area. More information about their operations and enforcement authority can be found at the [Puget Sound Clean Air Agency website](#).

WSDOT and the contractor will comply with additional agreements, such as environmental commitments made through regulatory and permitting processes. As most of the permits for this project have been received already, the WABN CCMP and the contract documents already include the commitments contained in those permits.

#### ***Measures and practices***

WSDOT will require the contractor to implement the following BMPs to help prevent, control, and manage the production of fugitive dust and reduce short-term impacts to air quality:

- Applying water to the dust generating active construction work areas as needed and, if applicable, to other areas of the work site, to keep the soil damp to minimize fugitive dust without creating unnecessary muddy areas.



- During the demolition of concrete structures as well as loading of construction trucks with demolition debris, using a water spray to minimize fugitive dust.

Additional BMPs may be identified after the contractor is selected, and this section of the CCMP may be updated if needed to reflect identified BMPs. These may include:

- When appropriate, installing tarpaulins on trucks to cover their loads prior to leaving the site to control loss of material while the trucks are in transit.
- Using efficient and modern equipment with appropriate emission-control devices (where applicable) to reduce emissions from vehicular exhaust. Low-sulfur diesel is used when possible.
- Storing sandblasting materials inside a building and using non-slag (inert) sandblasting abrasives when feasible.
- Immediately containing spent material from construction activities such as sandblasting and disposing at an appropriate facility.
- Implementing methods for efficient paint application to reduce over-spraying, including proper training for painters.
- When possible, using cleaners with low hazardous air pollutant and volatile organic compound content such as water-based, alkaline, or microbial cleaners.
- Limiting idling equipment to reduce emissions.

***For more information***

To contact the project about construction air quality effects happening in your area, see the contact information in the [Questions or Concerns?](#) section of this document or visit the [SR 520 Orange Page](#).

#### ***4. Visual Quality: Aesthetics, Glare, Lighting***

Construction of roadways can affect the quality and character of the surrounding community and landscape. Construction would cause temporary, but in some instances, considerable changes to views and visual context of the SR 520 roadway within the existing landscape, primarily due to the presence of work bridges, construction equipment, staging areas and vegetation removal.

***What to expect during construction***

The new WABN will be built immediately to the north of the existing structure. During construction operations, residents near the Seattle shoreline will see work in Lake Washington, including barges and floating derricks (barges with mounted cranes). Residents will also see work in and near construction staging areas near the former MOHAI building and the WSDOT Peninsula. Active construction will occur in these areas for the duration of the construction period, from summer 2014 through fall 2016.

[Figure 3](#) shows WABN construction access and haul routes.

While the contractor will conduct most active construction activities during daytime hours, work will also occur during the night and will require lighting. Notice will be provided to stakeholders when work is required outside of daytime construction hours (7 a.m. to 10 p.m. Monday through





Friday; 9 a.m. to 10 p.m. Saturday and Sunday). During the winter months (November through March), there will be increased work zone lighting at the beginning and end of the work day due to decreased daylight hours.

After the area at the former MOHAI area is no longer needed for construction staging, a stormwater management facility will be constructed. There has been extensive coordination between WSDOT and the city of Seattle regarding the landscaping plan and the layout of the access because of the proximity to East Montlake Park.

#### ***Applicable commitments***

WSDOT and the contractor will adhere to all WSDOT, federal, local, and statewide regulatory requirements and/or as required by the contract documents. This includes [WSDOT standard specifications](#).

As described in the [Section 106 Programmatic Agreement](#), WSDOT will protect trees and other screening vegetation identified adjacent to construction work areas to the maximum extent possible.

#### ***Measures and practices***

WSDOT will require the contractor to implement the following BMPs to minimize visual quality effects:

- Limit the use of construction lighting as much as possible. When lighting is required it will be shielded, directed toward the work, and pointed away from residences, traffic and other sensitive areas to the maximum extent practicable.

Additional BMPs may be identified after the contractor is selected, and this section of the CCMP may be updated if needed to reflect identified BMPs. These may include:

- Use directional lights instead of flood lights and direct light to the work zones and away from residents in order to minimize light pollution beyond the construction limits to the greatest degree practicable.

#### ***For more information***

To contact the project about construction visual effects happening in your area, see the contact information in the [Questions or Concerns?](#) section of this document or visit the [SR 520 Orange Page](#).

## ***5. Traffic and Transportation***

Construction of the project is likely to temporarily affect traffic and transportation in and near the project corridor due to adjustments to the existing roadways, changes to freeway access, temporary closures, detours, or changes in access to pedestrian and bicycle facilities and transit stops. In addition, construction equipment and activities may occupy a portion of the transportation right of way and construction truck traffic would be present on the roadways to haul materials.



### *What to expect during construction*

Construction effects related to traffic and transportation may occur related to:

- Haul routes
- Detours
- Maintaining access, including emergency service access
- Marine traffic impacts

#### **Local traffic**

The conditions that are expected to affect traffic operations the most are changes in the configuration of roadway lanes and intersections that would be required in the Montlake interchange area as construction progresses. Because of the temporary roadway changes that would be needed, traffic patterns would change periodically as the stages of construction progress, particularly on local streets in the Montlake interchange area.

#### **Highway traffic**

Traffic conditions on the freeways would remain similar to existing conditions during the most congested times of the day. Intermittent delays can be expected due to isolated construction events, but activities that close lanes on the highway would not be allowed during the daytime. Full highway closures and lane closures would be limited to nights and weekends when traffic volumes are lowest. WSDOT will notify the public of the times when travel through the area could be disrupted.

#### **Marine traffic**

Barges will transport supplies from waterfront locations around the Puget Sound and may be used to construct sections of the bridge that are in deeper water. The use of barges will reduce truck traffic coming to and from the west approach bridge. Work bridges will be required in areas where lake depth is too shallow to accommodate barge traffic.

### *Applicable commitments*

WSDOT will require the contractor to adhere to all WSDOT, federal, local, and statewide regulatory requirements and/or other regulations as required by the contract. This includes [WSDOT standard specifications](#) and coordination with the city of Seattle. WSDOT will secure street use permits necessary for construction from the city of Seattle and comply with the haul route terms outlined in the [Section 106 PA](#). The contractor will be required to coordinate with the city of Seattle related to truck traffic as appropriate.

[Figure 3](#) shows anticipated WABN construction access and haul routes.

### *Measures and practices*

The contractor will follow established BMPs, including:





### **Haul routes**

The contractor will likely use major roadways including I-5, SR 520, and I-90 in Seattle for major material haul routes. The contractor will also have the option to use other major arterials designated as truck routes to access these major roadways, and will use Lake Washington Boulevard, the westbound Lake Washington Boulevard off-ramp, 24th Avenue East, and the SR 520 on- and off-ramps to access construction staging areas at the former MOHAI site and in the WSDOT Peninsula area.

Additional Section 106 coordination will be required if the contractor proposes the use of haul routes outside of those previously identified in the Section 106 coordination process. If WSDOT determines that haul routes in Seattle not outlined in the [SR 520, I-5 to Medina: Bridge Replacement and HOV project Final Environmental Impact Statement](#) might be used, WSDOT will follow the process described in the [Section 106 PA](#).

### **In-water transportation**

Regarding shipping routes, at least one navigation channel shall be open at all times. Coordination with the adjacent SR 520 highway construction contractors shall occur to meet this requirement.

### **Planning and compliance**

- Perform the work in such a way as to prevent tracking of dirt and gravel onto local streets in accordance with the WSDOT's temporary erosion and sediment control (TESC) requirements.
- Access the site according to the terms of street use permit with the city of Seattle where applicable.
- Generate video documentation of the pre-existing conditions prior to starting work.

### **Detours and closures**

- Submit and obtain approval from the local jurisdiction for each planned local street closure.
- Coordinate closures/detours in advance with local transit providers.
- Provide adequate signing for detours and closures.
- Have all detours, including all signing, in place prior to the closure of any road or sidewalk, and acquiring all detour agreements with the affected local jurisdiction.

WSDOT will ensure advance notices regarding closures and/or detours are provided.

### **Damage minimization and repair**

- Repair any project-generated potholes as needed or as directed by WSDOT.
- Repair any project-generated damage to guardrails, barriers, attenuators, and traffic system signs.
- Provide adequate stormwater management during the project.



- Restore property and landscaping that is damaged in the course of construction to a condition similar or equal to existing before the damage occurred by repairing, replacing, rebuilding, or replanting.

#### **Access**

- Minimize interruptions to access to all public facilities affected by the project unless such access is determined to be a public/construction safety risk.
- Allow access to the site for spill response and make personnel and equipment available to respond to emergencies.
- Cooperate with law enforcement and other emergency response agencies in response to accidents, fires, spills or other emergencies in any area affected by the project.
- Work with emergency service providers to address their concerns about emergency access to and through the project corridor.
- WSDOT will ensure access to all historic properties is maintained. Except for emergency situations, provide 24 hours advance notice to affected property owners before any unavoidable interruptions of access. Consult with the affected property owners to address their needs, which may include the development of an alternate access strategy for short-term interruptions of access and longer-term detours.

If damage is identified by the owner during construction, the property owner is requested to notify WSDOT using the contact phone number described in [Questions or Concerns?](#) section of this document. This contact phone number is available 24 hours per day, 7 days per week. WSDOT will respond within 72 hours and consult with the property owner to assess the cause of the damage and will identify and provide for any necessary repairs. If WSDOT determines that project hauling activities are resulting in structural or architectural damage, WSDOT will direct the contractor to stop use of that route until appropriate safeguards can be put in place.

If the private property affected is a historic property, the repairs will be consistent with the U.S. Secretary of the Interior's [Standards for the Treatment of Historic Properties](#). Additionally, for affected historic properties, WSDOT will offer DAHP the opportunity to review and comment on the consistency of any repairs with the Standards.

To contact the project about traffic or transportation issues in your area, see the contact information in the [Questions or Concerns?](#) section of this document or visit the [SR 520 Orange Page](#).

## ***6. Utilities and Services***

WABN construction will require relocating some utilities, including power, sewer and gas lines.

#### ***What to expect during construction***

Relocation of a sewer line under SR 520 will involve excavation work on Lake Washington Boulevard, to include temporary closures of the westbound lane. Weekend closures of SR 520 will also be used for utility relocation. The contractor will provide a work plan for utility installation. As excavation occurs, the trench opening will be temporarily covered when work is not in progress. The trench will be backfilled and the area restored similar to existing condition.



Lane closures will be necessary on the northbound lanes of Montlake Boulevard East, north of SR 520 in order to establish a connection to the water line for fire protection, and temporary closures will also be necessary on the westbound Montlake Boulevard off-ramp. Drainage work may involve additional temporary lane closures on SR 520, Lake Washington Boulevard, and Montlake Boulevard.

WSDOT and the contractor will notify potentially impacted residents of necessary work that may result in service interruptions or closures.

Additional effects to utilities and services may be identified through further coordination with Seattle Public Utilities and Seattle City Light. This section will be updated as necessary.

#### ***Applicable commitments***

WSDOT and the contractor will adhere to all WSDOT, federal, local, and statewide regulatory requirements and or as required by the contract documents.

WSDOT and the contractor will coordinate with the city of Seattle prior to any service interruption.

Work will be performed in conformance with [WSDOT standard specifications](#).

#### ***Measures and practices***

Advanced notification will be provided to potentially impacted residents and other stakeholders before conducting work that may affect utilities or services. Notifications will include contact information for comments or questions.

Coordination with Seattle City Light, Seattle Public Utilities, Puget Sound Energy, Comcast, and CenturyLink regarding utility relocations and/or effects to service is anticipated. Disruptions to services that would affect surrounding homes or businesses will be minimized; advanced notification would be provided if such disruptions are required.

#### ***For more information***

To contact the project about utility or services in your area, see the contact information in the [Questions or Concerns?](#) section of this document or visit the [SR 520 Orange Page](#).

## ***7. Vegetation Management and Erosion Control***

Some vegetation will be removed from the project area so that the contractor can construct the work bridges and new SR 520 bridge structures to the north of the existing bridge.

#### ***What to expect during construction***

WSDOT will develop and implement a Tree and Vegetation Management and Protection Plan (TVMPP) prior to construction. The plan addresses areas of the WABN corridor where specific trees and/or vegetation are to be removed or disturbed as part of the construction or resulting project improvements.



The TVMPP identifies areas of mature tree removal, protection, potential relocation, and restoration of project areas. It also shows areas temporarily dedicated to construction, including staging and lay down areas. The goal of the plan is to minimize tree and vegetation removal. WSDOT will ensure that contractors adhere to the plan, notify neighborhoods prior to impacts, and that tree and vegetation removal would only occur at the approximate time required for construction.

WSDOT is also preparing a TESC Plan to identify BMPs for on-land work to reduce the risk of water quality impacts.

### ***Applicable commitments***

WSDOT and the contractor will adhere to all WSDOT, Federal, local, and statewide regulatory requirements and/or as required by the contract.

The WABN TESC Plan will be included in the contract documents. The contractor will need to modify the TESC Plan and the TESC plans to reflect specific means and methods and submit to WSDOT for review.

### ***Measures and practices***

The contractor will implement TESC BMPs where needed for on-land work, including:

- Marking sensitive and vegetation protection areas with high-visibility fencing.
- Installing silt fencing where needed to limit sediment transport downslope from construction areas.
- Implementing BMPs, such as temporary and permanent seeding, plastic covering, erosion control fabrics and matting, or early application of a gravel base on areas to be paved, for disturbed areas.
- Installing sediment retention BMPs on catch basins and inlets.
- Stabilizing channels and outlets using check dams, vegetation, or rock as required.
- Inspecting and maintaining BMPs during the course of construction.
- Re-vegetating exposed areas and maintaining vegetation.
- Stabilizing construction entrances for ingress and egress points to prevent tracking of mud and soil onto paved roads.
- Following the TESC Plan and Spill Prevention, Control and Countermeasure Plans (SPCC).

Additional BMPs may be identified after the contractor is selected, and this section of the CCMP may be updated if needed to reflect identified BMPs. These may include:

- Installing tire washes at construction entrances to reduce tracking of mud and soil onto paved roads.

The contractor will also comply with tree and vegetation protection measures outlined in the TVMPP.



*For more information*

To contact the project about vegetation management or erosion control issues in your area, see the contact information in the [Questions or Concerns?](#) section of this document or visit the [SR 520 Orange Page](#).

## ***8. Over-water and In-water Work***

This project involves the construction of a new bridge as well as removal of the westbound Lake Washington Boulevard off-ramp and unused R.H. Thomson ramps, portions of which are over water. The project will have construction activities in Lake Washington. These activities include movement of materials by barge, construction of temporary work platforms, bridge foundation construction, bridge superstructure construction, and removal of portions of the existing bridge. The project will also transport materials and bridge components through the Lake Washington Ship Canal.

WSDOT is preparing a Water Quality Monitoring and Protection Plan (WQMPP) per the Clean Water Act Section 401 certification to identify potential BMPs for in- and over-water work to reduce the risk of water quality impacts.

*What to expect during construction*

The WABN is being built over the water, north of the existing west approach bridge. Barges and temporary work platforms on steel pilings will be used to support equipment and materials used to build the drilled shaft foundations, bridge columns and bridge superstructure. With narrow shoulders on the existing bridge, any equipment or materials delivered by highway would require lane closures or reductions in traffic speeds. Weekend closures will be necessary for construction activities that cannot be completed while the bridge is operational. These activities would include demolishing the existing bridge barrier, placing temporary barrier in preparation of widening the existing bridge, and placing concrete for the bridge deck.

WSDOT anticipates that the contractor will supply some equipment and materials by barge to a construction staging area located on the work bridge. WSDOT is committed to maintaining access as feasible; however, access restrictions within the construction work zone will be necessary for safety and security purposes. [Figure 2](#) shows construction activities and locations of and temporary work platforms on Lake Washington. The public should expect barge trips to and from the Lake Washington work zone from locations to be determined once a construction contractor is selected.

*Applicable commitments*

WSDOT and the contractor will adhere to all WSDOT, federal, local, and statewide permits and approvals, including, but not limited to:

- Sections 401 & 404 of the Clean Water Act
- Hydraulic Permit Approval
- Coast Guard Permit Requirements
- [Seattle DPD SR 520 West Approach Shoreline permit](#)



*Measures and practices*

The contractor will work closely with WSDOT to ensure that work operations are in compliance with the commitments listed above.

There will be additional restrictions in the contract for work during certain fish windows, around certain events such as Seafair, and the opening day of boating season.

At least one navigation channel shall be open at all times. Coordination with the adjacent SR 520 highway construction contractors shall occur to meet this requirement.

The contractor will implement BMPs in accordance with the WQMPP where needed for in- or over-water work. The type of BMPs will vary depending on the work location and the type of work being performed and include:

- Daily inspections of BMPs with repair and maintenance as required.
- Using fueling locations and procedures approved by the Washington State Department of Ecology.
- Having spill response kits and containment booms on board barges and vessels.
- Providing containment and/or covering for fuels, concrete, concrete process water, stormwater runoff, construction materials and debris.
- Sweeping barges and work platforms.
- Anchoring portable restrooms.
- Using containment methods beneath structures being constructed or demolished and beneath work platforms.
- Avoiding barge grounding within the project area.
- Spraying down dust and grinding residue.
- Installing turbidity curtains when required.
- Providing linings for barges used to hold concrete and/or slurry water waste bins.

Additional BMPs may be identified after the contractor is selected, and this section of the CCMP may be updated if needed to reflect identified BMPs. These may include:

- Placing absorbent materials under stationary vehicles and equipment on barges or temporary work platforms.
- Placing concrete during dry weather conditions or protecting from adverse weather.
- Installing and using emergency cut-off valves on concrete pumps and pipelines.
- Operating equipment to minimize suspension of near shore sediments.
- Installing valves on slurry lines and closing when the lines are not in use.
- Providing containment when welding casing extensions.

*For more information*

To contact the project about in- or over-water construction issues in your area, see the contact information in the [Questions or Concerns?](#) section of this document or visit the [SR 520 Orange Page](#).



## ***9. Construction Staging in WSDOT Right of Way***

WSDOT anticipates that the contractor will stage equipment and materials both on land and barges near the construction areas. Staging areas would vary in size and function, but could be available for use by the contractor 24 hours per day, 7 days per week.

### ***What to expect during construction***

WSDOT anticipates that the contractor will develop an over-water staging platform at the east edge of the work bridge north of the existing west approach bridge to load and unload materials and equipment. In addition, the contractor will have the option of storing equipment and materials at identified construction staging locations, which could include the former MOHAI area northeast of 24th Avenue East and SR 520, and two areas south of SR 520 and east of East Lake Washington Boulevard on WSDOT-owned right of way and land known as the “WSDOT peninsula.”

Changes, if any, to on-land staging areas will need to be reflected in updated TESC plans and an updated SPCC Plan.

[Figure 2](#) and [Figure 3](#) illustrate construction staging areas, contractor access points, work bridges and haul routes.

### ***Applicable commitments***

WSDOT and the contractor will adhere to all WSDOT, Federal, local, and statewide regulatory requirements and or as required by the contract.

### ***Measures and practices***

To the maximum extent practicable, WSDOT will work with the contractor to:

- Locate construction sheds, barricades, and material storage away from private properties, and avoid obscuring views of and from private properties.
- Install temporary construction screens/barriers, such as plantings or fencing around construction areas so that visual impacts of construction activities on private properties are minimized. The location and type of screens/barriers will be determined in consultation with adjacent property owners.
- Avoid placement of temporary work bridges and other short-term construction features where they would require permanent removal of or would damage mature trees.

### ***For more information***

To contact the project about an SR 520 staging area, see the contact information in the [Questions or Concerns?](#) section of this document or visit the [SR 520 Orange Page](#).





## **IV. Questions or Concerns?**

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*Visit the website:*

- [SR 520 Bridge Replacement and HOV Program](#)
- [West Approach Bridge North Project](#)

*Call the project:*

- Call the 24-hour construction hotline at 206-708-4657 for immediate concerns regarding construction activities and possible property impacts.
- For general project information, call the automated SR 520 Information Line: 1-888-520-NEWS (6397). Options available on the information link include:
  - Option 1: To connect directly to the WSDOT Project Contact.
  - Option 2: To hear about SR 520, Medina to 202: Eastside Transit and HOV Project construction
  - Option 3: To hear about the SR 520, I-5 to Medina: Bridge Replacement and HOV Project
  - Option 4: To hear about the Pontoon Construction Project
  - Option 5: To hear general information about the SR 520 Bridge Replacement and HOV Program
  - Option 6: To hear about the tolling on SR 520
  - Option 7: To leave a message for the project team or to be added to the email distribution list

*Email the project team:*

- Submit a question or request information by emailing [SR520Bridge@wsdot.wa.gov](mailto:SR520Bridge@wsdot.wa.gov).

*Stay informed about project construction:*

Other tools available for the public to stay informed and involved related to project construction:

- [SR 520 Orange Page](#) for up to date construction information and closure updates.
- [E-mail distribution lists](#) – Login or subscribe to the SR 520 distribution list to get regular updates about construction activities.
- Highway advisory radio, variable message signs, active traffic management signs, project identification signs.
- [Public engagement activities](#) (meetings, briefings and open houses) are posted on the SR 520 program website.



## V. Figures

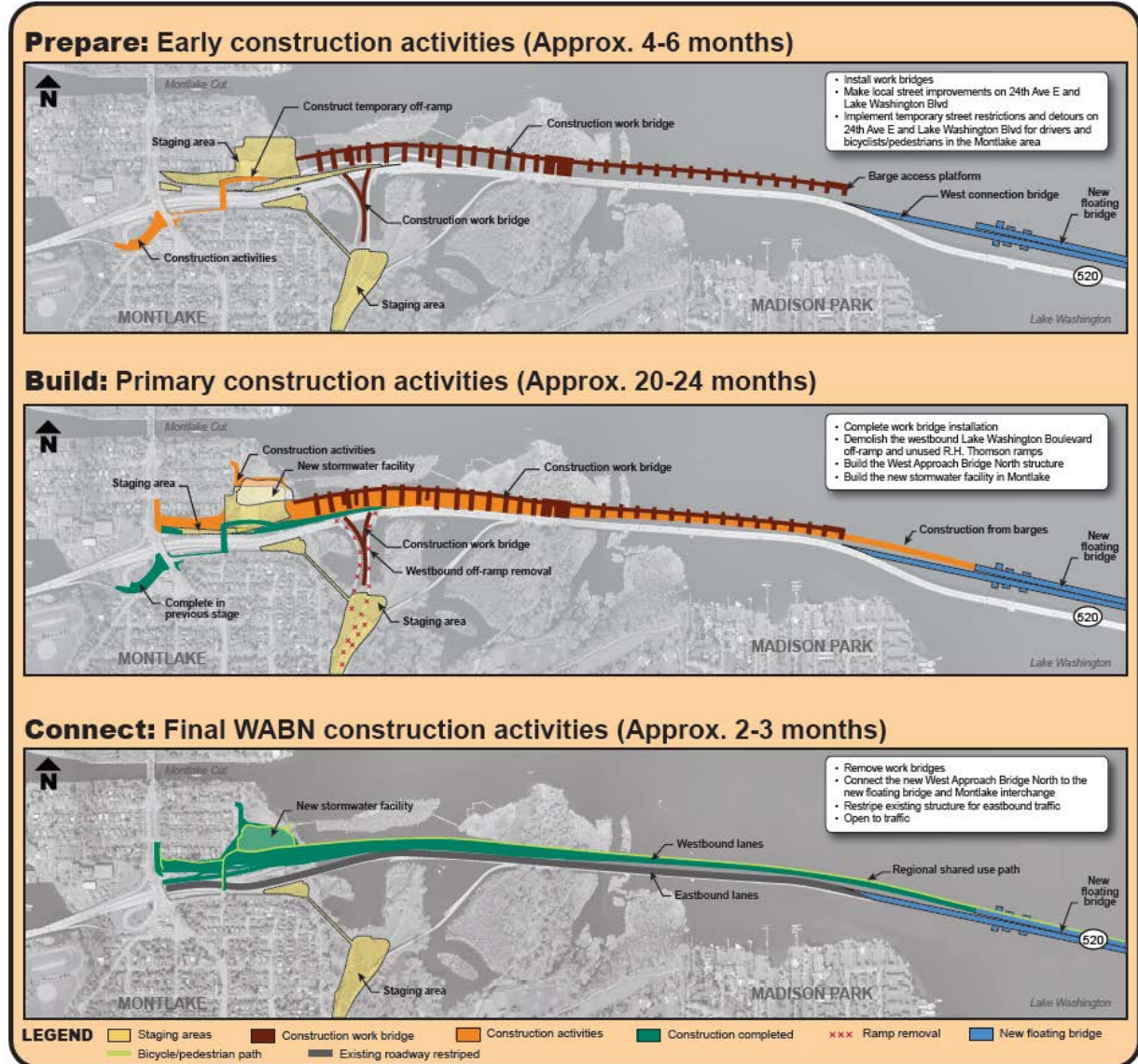
**Figure 1: WABN Configuration**



The new west approach bridge will be built as two separate structures, a north bridge and a south bridge. At this time, WSDOT is funded to build the north half of the west approach bridge. When complete, the West Approach Bridge North will connect westbound traffic from the floating bridge to Montlake. It will also feature a new 14-foot-wide regional bicycle/pedestrian path and a dedicated transit/HOV lane. Eastbound traffic will continue to use the existing west approach structure until funding is provided for the south half of the new west approach bridge.

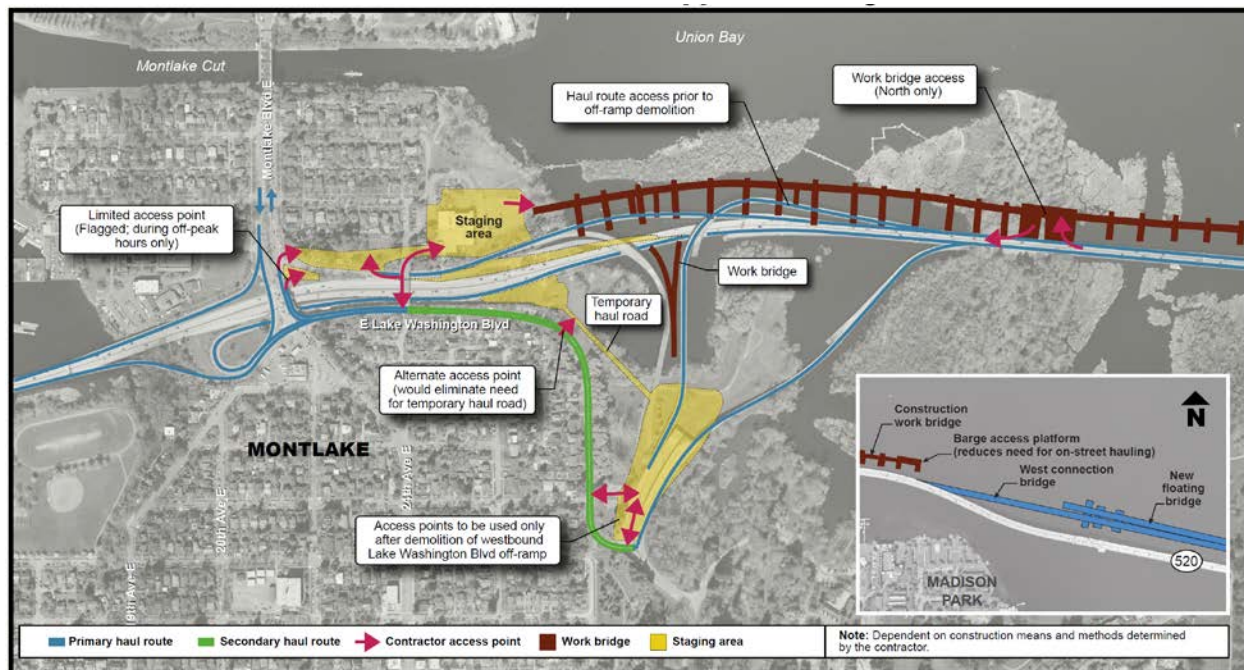


**Figure 2: Sequencing of WABN Construction Activities**



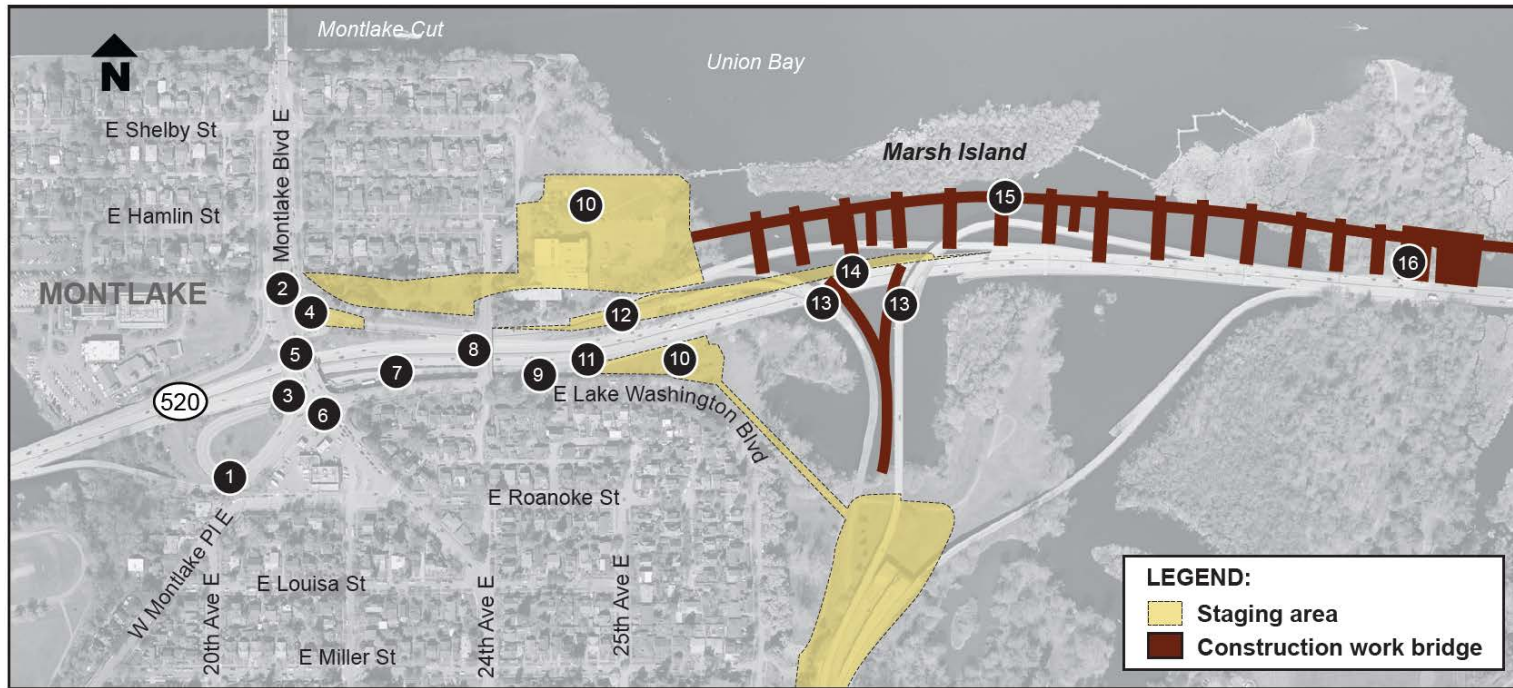


**Figure 3: WABN Construction Access and Haul Routes**





**Figure 4: Anticipated Nighttime Construction Activities**

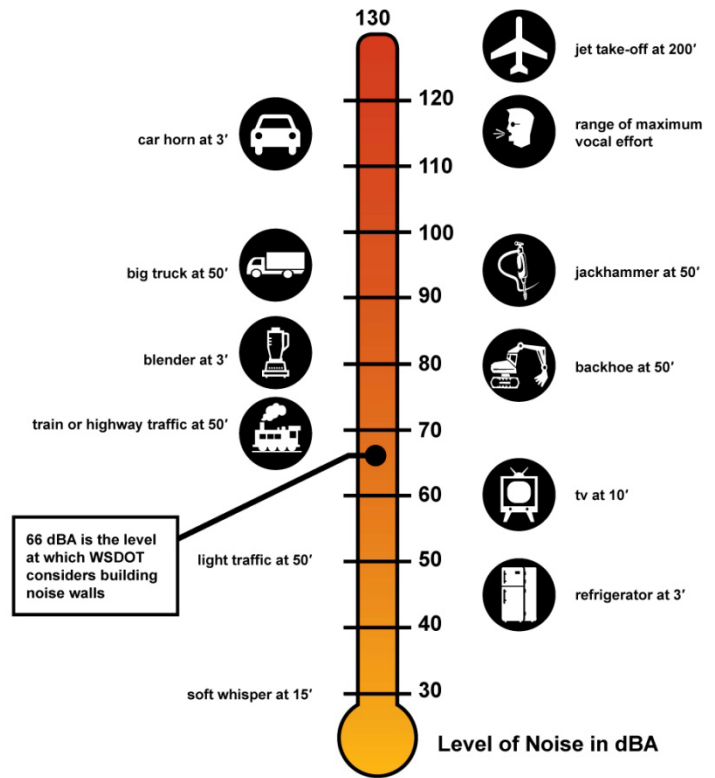


- ① Widen eastbound off- and on-ramps
- ② Repave Montlake Boulevard between SR 520 and Hamlin Street
- ③ Remove and replace transit island
- ④ Rebuild northbound bus stop
- ⑤ Remove and replace median on Montlake Boulevard
- ⑥ Remove and replace pedestrian islands at intersection of Montlake Boulevard and Lake Washington Boulevard
- ⑦ Repave Lake Washington Boulevard between Montlake Boulevard and 24th Avenue E and convert planter strip to traffic lane
- ⑧ Remove and replace railings and sidewalks on 24th Avenue E overpass
- ⑨ Install two manholes on Lake Washington Boulevard

- ⑩ Resupply materials and perform equipment maintenance within staging areas
- ⑪ Remove and replace SR 520 median barrier
- ⑫ Construct temporary westbound off-ramp (during SR 520 highway closure)
- ⑬ Remove ramps over SR 520
- ⑭ Install temporary traffic barrier on outside lane prior to widening bridge to the north
- ⑮ Resupply materials and equipment, reposition equipment on work bridge
- ⑯ Build temporary Foster Island work platform (during SR 520 highway closure)

**Figure 5: How do we hear noise?**

- Movement causes vibrations, or waves, in the air that produce sound once they reach our ears.
- Sound is measured in units called decibels (dBA).
- An average person's ear can perceive a 3 dBA or greater change in noise levels.
- A 10 dBA reduction sounds half as loud to the human ear; a 10 dBA increase sounds twice as loud.





### **Contact Information**

SR 520 Bridge Replacement and HOV Program  
I-5 to Medina: Bridge Replacement and HOV Project  
West Approach Bridge North

**Address:** 999 3rd Avenue, Suite 900, Seattle, WA 98101

**24-hour construction hotline:** 206-708-4657

**General information:** 1-888-520-NEWS (6397)

**Email:** [SR520Bridge@wsdot.wa.gov](mailto:SR520Bridge@wsdot.wa.gov)

**Web:** [www.wsdot.wa.gov/projects/SR520Bridge](http://www.wsdot.wa.gov/projects/SR520Bridge)

**SR 520 Orange Page:** [sr520.publicinvolvement.net](http://sr520.publicinvolvement.net)